

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1-8. (cancelled).

9. (currently amended) A method for charging a battery ~~[[(16)]]~~ from a direct-current source liable to significant fluctuations, comprising the repetitive steps of:

- converting the DC voltage from said direct-current source into a DC voltage which is higher than the voltage of said battery ,

- applying said higher DC voltage to the terminals of a storage capacitor, so as to transfer energy into said storage capacitor,

~~and is applied for progressively charging a storage capacitor,~~

- detecting a predetermined voltage threshold over the terminals of said storage capacitor ~~[[(14)]]~~, and

- upon detection of said voltage threshold, connecting said storage capacitor to said battery during a predetermined time, so as to ~~discharging~~ transfer energy from said storage

capacitor into said battery (16), ~~said discharging being~~
" ~~controlled by said threshold detection.~~

10. (previously presented) The method of claim 9,
implemented for charging a battery from a photovoltaic cells
source.

11. (previously presented) The method of claim 9,
implemented for electrically supplying a lighting equipment
for a vehicle, from a bicycle dynamo-electric generator.

12. (currently amended) A device for charging a
battery [(16)] from a direct-current source liable to
significant fluctuations, implementing the method according to
any of preceding claims, comprising:

- means [(14)] for storing capacitive energy,
- means [(13)] for converting the DC voltage from
said direct-current source into a DC voltage which is higher
" than the voltage of said battery,
- means for applying said higher DC voltage to the
terminals to said capacitive storage means, so as to transfer
energy from said converting means into said capacitive storage
means,

~~- means for progressively charging said capacitive storage means at said DC voltage provided by said converting means,~~

- means [(17)] for detecting a predetermined voltage threshold over the terminals of said capacitive storage means (14), and

- means [(15)] for ~~discharging~~ connecting said capacitive storage means ~~into~~ said battery during a predetermined time, so as to transfer energy from said capacitive storage means to said battery, said connecting means ~~said discharging means~~ being controlled by said threshold detection means.

13. (previously presented) The device of claim 12, characterized in that it further comprises filtering means (11) arranged between said direct-current source and said progressively-charging means (13).

14. (previously presented) The device according to claim 12, characterized in that it further comprises means for adapting the predetermined voltage threshold at the terminals of said capacitive storage means (14), in function of the type of battery to be charged.

15. (previously presented) The device according to claim 13, characterized in that it further comprises means for adapting the predetermined voltage threshold at the terminals of said capacitive storage means (14), in function of the type of battery to be charged.

16. (previously presented) The device according to claim 14, characterized in that the threshold-adapting means comprise a commutable resistor (35a, 35b, 35c).

17. (previously presented) The device according to claim 15, characterized in that the threshold-adapting means comprise a commutable resistor (35a, 35b, 35c).

18. (previously presented) The device of claim 12, characterized in that the progressively-charging means (13) comprise inductive storage means (29) cooperating with controlled switching means (28).